



METS ENERGY S A L

Model	MP1850-S		NA			
Frequency/Speed - Voltage	50HZ/1500 RPM- 230/400V		60HZ/1800 RPM- 230/400V		60HZ/1800 RPM- 277/480V	
Prime Power	1845 KVA	1467 KW	NA	NA	NA	NA
Standby Power	2029.5 KVA	1623.6 KW	NA	NA	NA	NA



Image for illustration purposes only.

Features

Engine	Perkins ,4016TAG1A , Made in UK, in accordance to ISO3046 ,ISO8528,DIN6271
Alternator	Stamford PI734E , Made in UK, complying to the norms: BS EN60034/ BS 5000/ VDE 0530/ NEMA MG 1-32/ IEC 34/ CSA C22.2-100/ AS 1359
Control Panel	Deap sea, M-DCM-417(7320) ,Made in UK, complying to the norms: BS EN60034/ BS 5000/ VDE 0530/ NEMA MG 1-32/ IEC 34/ CSA C22.2-100/ AS 1359
Base Frame	Black steel with Anti-vibration pads, Built in fuel tank
Sound Proof Canopy	Modular SPC, Powder Coated, Extremely Durable, Designed to Reduce Sound Level with Maximum Service Accessibility and Minimum Foot Prints
Worldwide Support	Mets Energy Products are distributed through its PowerMets International Network For more information kindly check our website www.metsenergy.com

Rating Definitions and Conditions

Prime Rating	The power available for an unlimited hour usage with an average load factor of 80% of the published prime power over each 24 hours period. A 10 % overload is available for 1Hr every 12 hours.
Standby Rating	The power limited to 500 hours annual usage with an average load factor of 80% of the published standby power rating over each 24-hour period. Up to 300 hours of annual usage may be run continuously. No overload is permitted on standby power.
KVA Rating @ 0.8 P.F	

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Engine Perkins, 4016TAG1A , 4 Stroke Cycle, Diesel

Structure	Number of Cylinders	16		
	Engine Build	60 ° V		
	Bore	160 mm		
	Stroke	190 mm		
	Displacement	61.123 L		
	Compression Ratio	13.6 /1		
	Aspiration	Turbocharged		
	Cooling	A /A		
		1500 rpm	1800 rpm	
	Fuel Tank	NA	NA	
Fuel	Fuel System	Direct injection		
	Fuel Recommended	N°2 Diesel		
	Fuel System Make (ECM)	-		
			1500 rpm	1800 rpm
	Delivery Flow Rate (l/hr)			
	Fuel Consumption			
	100% Load (g/kWh-L/hr)	205 (383)	NA	
	75% Load (g/kWh-L/hr)	198 (277)	NA	
	50% Load (g/kWh-L/hr)	198 (185)	NA	
Cooling system	Engine Coolant Capacity		316 L	
	Air Flow-Radiator	39900 l/s	NA	
	radiator with 50 degree ambient Cooling Package & Air Cleaner Kit			
	Thermostatically-controlled system			
Air Inlet	Air Intake Engine (Clean Filter/Dirty)	1.2 / 3.7kPa		
Exhaust System	Exhaust Gas Temperature (Prime)	438 °C	NA	
	Exhaust Gas Flow (Prime)	3333.3 l/s	NA	
	Maximum Exhaust System Back Pressure	7.95 kPa	NA	
	Muffler	residential (20→25 dB)	industrial(15→25 dB)	
	Stainless Steel exhaust flex-fittings			
DC System-Starting/Charging	Cranking Battery Voltage	24 V		
	Battery Charging Alternator	40 A		
	Dc Voltage Monitoring via control			
Heat Rejection(prime)	Radiated Heat to Ambient (Prime)	103 kW	NA	
	Heat Rejection to Coolant (Prime)	586 kW	NA	
	Heat Rejection to Exhaust (Prime)	1079 kW	NA	
	Heat Rejection to intercooler (prime)	490 kW	NA	
Lube System	Lubricating System Oil Capacity	237.2 L		
Governor	Electronic			

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Alternator Stamford, PI734E

Structure	Insulation System	Class H	
	Winding Pitch	2/3 to minimize harmonics effects	
	Number of Poles	4	
	Number of Bearings	Single bearing	
	Winding Leads	6	
	Power Factor	0.8	
	Over Speed Capability (% of Rated)	2250 Rpm (150%)	
	Wave Form Distortion	No load < 1.5% Non-Distorting balanced linear load < 5.0%	
	Telephone Interference	THF< 2%	
	IP Rating (Protection)	IP23	
	AVR	Separately excited by PMG	
	Synchronous, 3 phase, Brushless & Self ventilated		
		1500 rpm	1800 rpm
Power Switching	3-P Circuit Breaker, ACB	3200A	NA
Temperature	Temperature Rise	125/40 °C	
Control & Voltage Regulator	Control System (Standard)	Separately excited by PMG	
	Voltage Regulator (AVR)	MX321(3 phase sensing) or MX341(1 phase sensing)	
	% Of Voltage Regulation	± 0.5 % (for MX321) / ± 1.0 %(for MX341)	
Motor Starting Capacity@30%	if voltage 230/400V	TBA	
Voltage Dip	if voltage 277/480V	TBA	


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Standard Controller, M-DCM-417(7320)

Control	Auto/Start/Stop Control Emergency Stop Pushbutton/ Alarm Acknowledge Engine Cool Down Timer Warm-up Timer Load Switching Timer Engine Cycle Crank	
Indications	Operating Hours 3 Phase Generator Voltage Sensing & Monitoring Current Protection & Monitoring Power Measurement (kW, kVA, kVA _r , kWh, kVAh, kVA _r h, pf) Frequency Monitoring (Hz) Oil Pressure/Coolant Temperature/Fuel Level Monitoring Battery Voltage Monitoring (DC) Alarm Acknowledge	
Warning & Shutdown Alarms	Generator Over/Under Voltage & Frequency Crank Disconnect (Failure to Start) Under/Over Speed Over Current Low oil pressure High Water Temperature Low Fuel Level Low Water Level	
Features	IP 65 (if ordered with gasket) Basic Scheduler 8-35 VDC Supply Digital Inputs(4)- Outputs(4 MPU/ 6 CAN) Event Log (5 shutdowns)	

Optional Accessories

Alternator	AVR (3 phase Sensing) Reactive Droop Winding Temperature Detectors Anti- Condensation Heaters Excitation with auxiliary exciter (PMG)
Power Switching	4-P Circuit Breaker Special Brands (ABB- MG- Siemens...) Motorized Operation Shunt Trip Under Voltage Trip UVT Residual Current Protection Ground Fault Protection Earthing Kit Surge Arrestor

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Optional Accessories^(continues)

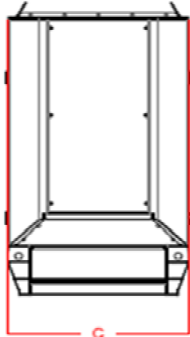
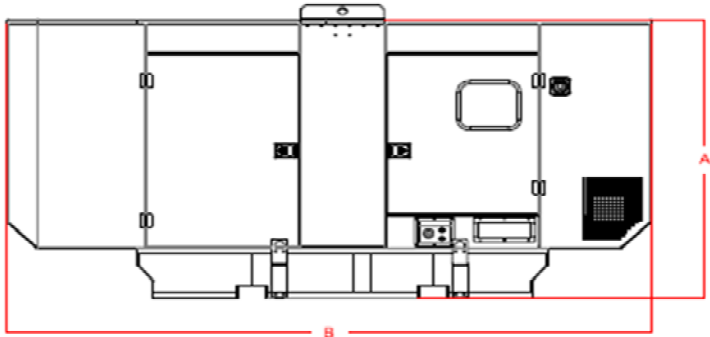
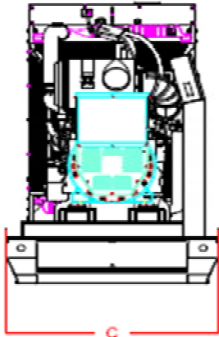
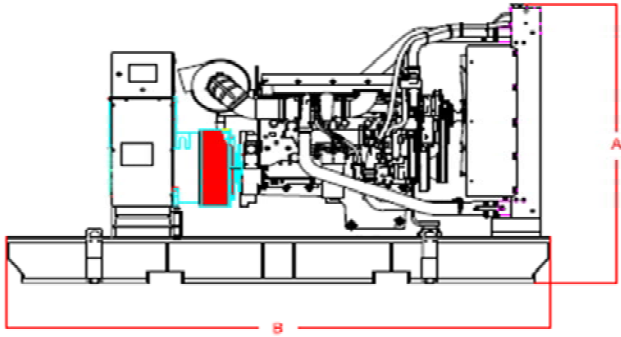
Engine	Fuel	Micro-Diesel Filter for Micro-Particles Filtration	
		Automatic Fuel Refilling System	
		Fuel Water Separator (2000/40)	
		Mechanical Fuel Level Kit	
		Oversize Fuel Tank Upon Custom Requirements	
		Fuel Tanks-Pipes Heater	
		Optional Built in fuel tank 180 L operation full load (Height will be increased by 100 mm and weight by	
		Air Inlet	Sy-klone Air Cleaner Installed @ Air Intake System
		Exhaust	Muffler: Critical (25→30 dB) Hospital (35→40 dB) Elbow, Flanges, Expanders & Y Adaptors
		Cooling / Heating	Radiator with 35 °C or 60 °C Ambient Capability Jacket Water Heater
Lube	Manual Sump Drain Pump		
	Semi-Rotator Hand Pump		
DC System - Starting/Changing	Mains Battery Charger 24 V DC-5A		
	Battery Charger 10A-20A on Request		
	Automatic Battery Charger on Request		
	Battery Disconnect Switch		
	DC/AC Current Monitoring (Ammeter) Oversize Battery		
Control Panel	DSE 7310/7320/7410/7420-More Inputs & Outputs-Advanced Communications Features; DSE 8610/8710/8810- Load Share Module; Digital & Analogues Inputs Module DSE 2130 (for 7000 Series & Above); Analogue Inputs advanced Module DSE 2131-2133(for 7410 &Above); Digital relay Outputs Module DSE 2157 (for 7000 Series &Above); Analogue Outputs Module DSE 2152 (for 7410 & Above); Local & Remote enunciator Module DSE 2548 (for 7000 Series & Above); Display Modules DSE 2510/2520 (with 7310-7320); Remote Monitoring via: Web Interface (All Series), GSM (for 7000 Series & Above), RS485 Dry Contacts Alarm Indication for Customer Use Audible Alarm (Option for 6010/20; Standard for 7000 Series & Above); Voltage Adjust Potentiometer; Speed Adjust Potentiometer;		



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Dimensions & Weights

	Length (mm)	Width (mm)	Height (mm)	Weight Dry
Open set (NB)	6000	2740	3020	15416
SPC Type S	10000	3500	3500	21416



Drawings for illustration purposes only.

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